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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/000,219	12/04/2001	Masafumi Nishitani	Q67539	9175

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EXAMINER

DUONG, THANH P

ART UNIT PAPER NUMBER

1764

DATE MAILED: 05/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/000,219

Applicant(s)

NISHITANI ET AL.

Examiner

Tom P. Duong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9-12 and 15-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9-12 and 15-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

In view of the amendment after final filed on April 14, 2005, PROSECUTION IS HEREBY REOPENED. Applicant's arguments are persuasive and new grounds of rejection are set forth below.

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 4, 5-7, 10-12, 17-26, and 33-36 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Chen (6,368,233). Chen discloses a wood-type golf club head having a hollow head body comprising: a shaft (not shown but inherent feature of a golf club); and a striking face 62 including a plurality of metal pieces (main piece 62 of titanium and arcuate piece 64 of stainless steel); a crown member 30 including a plurality of pieces (main piece 32

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titanium and annular piece 34 stainless steel. With respect to the methods of forging, rolling, plastic forming, post-machining, press forming, and laser welding of the face member, such manufacturing methods are well-known in the golf club art. Alternatively, the recitation of such process limitation does not further add structural limitation to the claimed invention. Note, the patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even through the prior product was made by a different process. See *In re Whorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) and *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324 (CCPA 1974). See MPEP 2113.

2. Claims 27-29 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Peterson (6,339,869). Peterson discloses a wood-type golf club head having a hollow head body (Fig. 1) comprising: a shaft (19); a side wall member including a plurality of pieces (side wall 30 and cap 36). With respect to the methods of forging, rolling, and laser welding of the side wall member, such manufacturing methods are well-known in the golf club art. Alternatively, the recitation of such process limitation does not further add structural limitation to the claimed invention. Note, the patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even through the prior product was made by a different process. See *In re Whorpe*, 777 F.2d 695, 698, 227 USPQ 964,

966 (Fed. Cir. 1985) and *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324 (CCPA 1974). See MPEP 2113.

3. Claims 1, 3-7, 9-12, and 15-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minabe (5,961,394) in view of Shaw et al. (5,423,535). Regarding claims 1, 7, and 15-23, Minabe discloses a wood-type, golf club head (Fig. 1) comprising: a face member 12, a shaft 26 attached to metal head 12 wherein the metal head (Figure 1) comprises a body 12 having an opening in which a striking face member 12 is disposed. Minabe fails to disclose the striking face member including a plurality of metal pieces. Shaw teaches a metal face plate (Col. 2, lines 13-20) can be made of one or more component(s) (Col. 1, lines 42-58 and Figs. 23-26), which are welded together (Col. 4, lines 23-29). Such multi-piece face component(s) provide a golf club with different properties such as weight distribution, friction, spin rates, flexural modulus, resilience, and hardness, and aesthetic appearance (Col. 2, lines 13-17, Col. 2, lines 39-43), Col. 3, lines 35-45). Thus, it would have been obvious in view of Shaw to one having ordinary skill in the art to modify the striking face member of Minabe with a face member with a plurality of pieces as taught by Shaw to gain the above beneficial properties. With respect to the methods of forging, rolling, plastic forming, and laser welding of the face member, such manufacturing methods are well-known in the golf club art. Alternatively, the recitation of such process limitation does not further add structural limitation to the claimed invention. Note, the patentability of a product does not depend on its method of production. If the product in the product-by-process claim

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is the same as or obvious from a product of the prior art, the claim is unpatentable even through the prior product was made by a different process. See *In re Whorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) and *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324 (CCPA 1974). See MPEP 2113. Regarding claims 3 and 9, Minabe fails to disclose the metal pieces of the face member have different thicknesses. Shaw teaches the face-piece components may have a thickness variation in vertical and lateral planes and such geometric configuration facilitates proper weight distribution to the club head (Col. 2, lines 39-63). Thus, it would have been obvious in view of Shaw to one having ordinary skill in the art to modify the golf club head of Minabe with metal pieces have different thicknesses to provide proper weight distribution to the club head. Regarding claims 4 and 10, the combination of Minabe in view of Shaw discloses the face material component(s) of the claimed invention since Shaw teaches the face component(s) may be selected from a variety of materials in order to obtain certain properties such as weight distribution, hardness, and flexural modulus, and etc. (Col. 2, lines 13-24); thus, it would have a prima facie obvious to one having ordinary skill in the art to select various materials for the face components to obtain certain desirable properties for the club head. Regarding claims 5 and 11, the recitation of melting temperature does not further add structural limitation to the claimed invention, and it appears the combination of the above applied references has a face components with melting temperature of the claimed invention being the fact that the face material of the applied references is the same as the face material of the claimed invention. Regarding claims 6 and 12, Applicants have not disclosed criticality and/or unexpected results;

thus, it appears the selection of material for the face components is obvious matter of design choice.

4. Claims 30-32 and 34 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Galy (5,971,867). Galy discloses a wood-type golf club head having a hollow head body (Fig. 4) comprising: a shaft (inherent feature of golf club); a sole member including a plurality of pieces (sole plate 11 and arc shape portion 33). With respect to the methods of forging, rolling, and laser welding of the sole member pieces together, such manufacturing methods are well-known in the golf club art. Alternatively, the recitation of such process limitation does not further add structural limitation to the claimed invention. Note, the patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even through the prior product was made by a different process. See *In re Whorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) and *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324 (CCPA 1974). See MPEP 2113.

Response to Arguments

Applicant's arguments filed 4/14/05 have been fully considered but they are not persuasive. (1) With respect to argument of Shaw is relate to an iron while Minabe relates to a wood golf club, Examiner agrees that the geometry and/or configuration of the wood is different than an iron golf club head; however, the basic features such as

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face, sole member, crown and etc. of the wood and the iron are the same. Minabe discloses the wood type golf club head with a metal striking face of the claimed invention, but fails to disclose the striking face member including a plurality of metal pieces. Shaw teaches the multi-piece face component(s) provide a golf club with different properties such as weight distribution, friction, spin rates, flexural modulus, resilience, and hardness, and aesthetic appearance (Col. 2, lines 13-17, Col. 2, lines 39-43), Col. 3, lines 35-45). It is submitted that Shaw discloses the "preferred" golf club structure being golf irons (Col. 1, lines 16-25) but it is not limited to the scope of the invention, which includes wood and/or putter type golf club head. Note, the concept is the same whether the feature of the multi-piece components of Shaw are applied to a wood, irons, and/or putter. Thus, it would have been obvious in view of Shaw to one having ordinary skill in the art to modify the striking face member of Minabe with a face member with a plurality of pieces as taught by Shaw to gain the above beneficial properties. (2) With respect to the argument of a product-by-process limitations such as joining metal pieces of the face member, Examiner respectfully disagrees. The combination of Minabe in view of Shaw provides the same golf club of the claimed invention. Minabe discloses the golf club head parts could be welded by laser welding method (Col. 4, lines 5-14). Shaw also teaches the face piece-component (s) may be attached or secured by any conventional means including welding (Col. 4, lines 23-29) and there is nothing unobvious about using conventional welding techniques such as MIG, TIG, and/or laser welding to welding club parts together including welding a plurality of metal pieces of the face member. Examiner agrees that there is several

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distinct advantages of using laser welding of metal club parts such as small affect heating zone, which minimizes corrosion and cracking, and the precision of laser welding provide a smooth and continuous weld. These properties are inherent in the laser welding of Minabe and Shaw references and the results are expected.

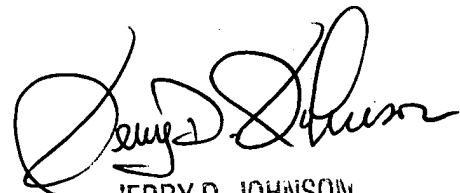
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom P. Duong whose telephone number is (571) 272-2794. The examiner can normally be reached on 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tom Duong
May 4, 2005
TD



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